CLAIMS

1. A roller bearing (10) comprising a plurality of bearing rollers (12)located between confronting bearing surfaces (16,19), said bearing surfaces being rotatable one relative to the other about the rotational axis of the bearing, and said bearing comprising biasing means (18) which provides a force acting in a direction between said confronting bearing surfaces (16,19) whereby, under all load conditions for which the bearing is designed for use, each bearing roller is retained in contact with each of said confronting bearing surfaces.

2. A roller bearing according to claim 1, wherein said biasing force is provided by deformability of the or each bearing roller (20).

3. A roller bearing according to claim 1 or claim 2, wherein said biasing force is provided by deformability of at least one of the confronting bearing surfaces (16).

4. A roller bearing according to claim 2 or claim 3, wherein an edge region of a bearing surface of at least one of said confronting bearing surfaces or a bearing surface of a roller, when in an unstressed condition, comprises a zone (15,23) which protrudes above the adjacent surface region of said bearing surface.

5. A roller bearing according to any one of claims 2 to 4, wherein the body of material which defines at least one of said confronting bearing surfaces, or the bearing surface of a roller, is undercut at an edge region of that bearing surface thereby to provide between the undercut and bearing surface a deformable overhang region (18,28).

6. A roller bearing according to any one of claims 2 to 5, wherein a bearing ring (13) defines one of said confronting bearing surfaces and is provided

with an undercut (17), said undercut being provided in that half of the thickness of the ring which is adjacent the bearing surface of said ring.

7. A roller bearing to any one of claims 2 to 6, wherein each of the two edge regions of a bearing surface is provided with a deformable overhang.

8. A roller bearing according to any one of the preceding claims, wherein at least one of the confronting bearing surfaces has associated therewith a deformable component (30,40) to serve as said biasing means.

9. A roller bearing according to claim 8, wherein said deformable component (30) is deformable by virtue of the shape and flexibility of the component.

10. A roller bearing according to claim 8 or claim 9, wherein the deformable component (40) is deformable by virtue of compressibility of the material of the component.

11. A roller bearing according to any one of claims 8 to 10, wherein the deformable component is a biasing ring (30) positioned between the bearing surface (33) of one of said confronting bearing surfaces and an abutment surface (34) associated with said bearing surface.

12. A roller bearing according to any one of claims 8 to 11, wherein the biasing means is a biasing ring (40) provided substantially centrally between end regions of a bearing surface.

13. A roller bearing according to any one of the preceding claims and which is a radial type roller bearing.

14. A roller bearing according to any one of the preceding claims, wherein the bearing rollers are cylindrical.

15. A roller bearing according to any one of claims 1 to 13, wherein the bearing rollers are taper type rollers.

16. A multi-stage gear unit comprising a high speed and an intermediate speed shaft wherein at least one of said shafts supported by a roller bearing (10) according to any one of the preceding claims.